My experience with SARS

C. Mark Cheung

I t was Sunday, Apr. 13. My turn to do a shift on the SARS ward at Sunnybrook and Women's College Health Sciences Centre. I remember feeling little apprehension as I stepped into the car. Just the day before, a close friend had recounted the story of an internist in Singapore who died of SARS despite using full barrier protection. Privately I discounted the story and told my wife, also a physician, that there might well have been a breach in protection or protocol.

I shared a busy shift with a colleague, caring for a number of very sick patients. One was going to the critical care unit; another had just been discharged from the unit but was getting worse. The evening physician arrived a little late, but I was relieved to be going home. I changed out of my surgical scrub suit and left the hospital.

My wife had asked that I isolate myself at home after the shift. Having 2 young daughters, I agreed to err on the side of caution. From that night on, I spent most of my time in the basement, wearing a mask whenever I went upstairs and eating meals by myself with disposable utensils.

In the early hours of Apr. 16, I felt warm and unwell. I repeatedly measured my temperature. After some fluctuation, it steadily rose. I was forced at once to confront the possibility of SARS as a cause for my fever. I reflected on the disease itself: a novel virus causing a respiratory failure whose treatment was based on opinion rather than evidence. I mentally ran over our financial situation and reassured myself that my family would not be left wanting if I died. I struggled, though, with the thoughts of parting from my wife and not being able to watch our wonderful children grow.

I called several people at the hospital about my fever, and I ensured that my clinical duties could be taken over by someone else. Colleagues reassured me that I could not have contracted SARS, because no health care workers had been infected while using the current protective equipment and protocols.

When my temperature hit 39°C, I called the infectious disease consultant on call and was advised to come in the next day for assessment. I spent the rest of day in bed in the basement with a sense of unreality, worrying about my family as the fever mounted. Had I infected my wife? Who would look after my children if she became ill? What if the children became infected? I would not want to survive only to know that I had caused the death of a loved one in my immediate family.

The next day I drove myself to the hospital and parked



in my usual spot. At the Emergency Department I was led to the SARS assessment room for a careful assessment by infectious disease fellow Mona Loutfy and staff physician Anita Rachlis. My blood work was fine, but for lymphopenia and a mildly elevated glucose level, the former worrisome and the latter a surprise. The chest radiograph was suspicious.

A cascade of events followed: a lingular infiltrate on the CT, admission to hospital and treatment with ribavirin and prednisone, followed over the next few days by lymphopenia, thrombocytopenia and an ever-escalating lactate dehydrogenase level. The ribavirin made me very nauseous. All of my liver enzyme levels began to rise. I was given pulse doses of 500 mg of methylprednisolone daily for 3 days. My fever persisted.

As night fell on my eleventh day in hospital, Saturday, Apr. 26, my breathing deteriorated rapidly. For the first time since I was admitted to the hospital, I grabbed for supplemental oxygen. My respiratory rate rose to such an extent that I knew it was unsustainable. As help was being summoned, I called my children to say "good night" because I could not be sure what would happen next. My wife did her very best to reassure me, putting up a brave front on the telephone.

Peter Webster, a senior respirologist who had taught me as an intern, quickly arrived to evaluate my condition. He drew blood and sampled arterial blood gases. The critical care service was summoned in anticipation of a transfer.

Peter and I had an almost surreal academic discussion about why I was doing so poorly despite a paucity of objective findings to explain the deterioration in my condition. We agreed that my lungs were simply too stiff, and he noted that I exhibited the sign of tracheal tugging.

I was becoming irrational and panicky, even asking if a transfer to another hospital might help. Peter calmly reassured me and called an infectious disease consultant at another hospital. We all talked over the telephone about what could be done, but there was little evidence to guide us. I felt lost and despondent.

At about midnight, Peter called me. After I had received 3 daily doses of 500 mg of methylprednisolone intravenously, the dose had been tapered to 50 mg of prednisone daily as per the guidelines. Peter wondered if rapid tapering of the steroids was partly responsible for the deterioration in my condition and ordered 125 mg of methylprednisolone. My nurse administered the steroid with a sense of urgency. Within an hour, I was much more comfortable and a few hours later I was amazed to find that I had awoken from a peaceful sleep. I was relieved to find that I did not have an endotracheal tube in my mouth.

My recovery was slow but steady after the crisis of Apr. 26. Throughout my illness, I had often felt pessimistic about my prospects for recovery. As I spent my 47th birthday in hospital, my outlook was not helped by the news that 2 previously healthy SARS patients, aged 44 and 39 years, had died of the illness. However, once there were both physical and laboratory improvements in my condition, my spirits lifted rapidly. I was encouraged by a phone call from Allison McGeer, who had also battled SARS personally. Allison assured me that SARS was at its worst in the second week of the illness. If one was not intubated by the end of the second week, it was very unlikely to happen at all. My hope was strengthened.

May 1 was the first day that my temperature was 37°C or less. My oxygen saturation reached 0.99 and never fell again. The laboratory parameters improved steadily, and I felt increasingly well albeit still very weak.

Discharge planning began in earnest. My sister-in-law was generous enough to move out of her house so that I could stay there by myself during my mandatory quarantine period after discharge.

Finally the day came for me to leave the hospital, exactly 3 weeks after I was admitted. All the nurses on the ward and the patient care manager waved goodbye as I stepped out of my room. Saying "thank-you" seemed inadequate, given how I much I appreciated their excellent care. I went to my car in its usual spot, started it and left the hospital grounds with a feeling of elation.

Following a month of quarantine, a joyous reunion with my family and a new appreciation for the mundane ensued. I returned to work and was overwhelmed by the warm greetings. I learned that for 3 weeks my parked car had been a poignant daily reminder of my hospitalization for colleagues who were continuing to struggle with the impact of the outbreak.

I am happy that I was able to drive home for them.

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This article is dedicated to the memory of Dr. Carlo Urbani and all of the health care workers who made the ultimate sacrifice in the global struggle against SARS. Among them were the 2 very sick patients I cared for on my ill-fated SARS shift: may they rest in peace.